

CLAIMS

We claim:

1. An isolated nucleic acid that encodes SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:10, SEQ ID NO:12, SEQ ID NO:14, or SEQ ID NO:16.
2. The isolated nucleic acid of claim 1 comprising SEQ ID NO: 3, SEQ ID NO:5, SEQ ID NO:7, SEQ ID NO:9, SEQ ID NO:11, SEQ ID NO:13, or SEQ ID NO:15.
3. A transgenic monocot cell having a genome comprising a nucleic acid sequence that encodes a protein of SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:10, SEQ ID NO:12, SEQ ID NO:14, or SEQ ID NO:16.
4. A transgenic dicot cell having a genome comprising a nucleic acid sequence that encodes a protein of SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:10, SEQ ID NO:12, SEQ ID NO:14, or SEQ ID NO:16.
5. A transgenic plant with a genome comprising a nucleic acid nucleic acid sequence that encodes a protein of SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:10, SEQ ID NO:12, SEQ ID NO:14, or SEQ ID NO:16.
6. A transgenic plant of claim 5 wherein the plant is rice.
7. A transgenic plant of claim 5 wherein the plant is maize.
8. A transgenic plant of claim 5 wherein the plant is tobacco.
9. A transgenic plant of claim 5 wherein the plant is cotton.
10. Seed of a transgenic plant of claim 5.
11. Progeny of seed of claim 10.
12. In a method of producing Toxin A of *Photobacterium luminescens* W-14 in a heterologous host the improvement comprising expressing in said host DNA that encodes a protein selected from SEQ ID NO:10, SEQ ID NO:12, SEQ ID NO:14, or SEQ ID NO:16.
13. A method of producing an orally active insect toxin which comprises expressing in a host other than *Photobacterium luminescens* W-14
 - a) DNA that encodes TcdA1,
 - b) DNA that encodes a protein selected from the group consisting of TcdB1 and SEQ ID NO:10, and
 - c) DNA that encodes a protein selected from the group consisting of SEQ ID NO:12, SEQ ID NO:14, and SEQ ID NO:16.
14. A method of producing an orally active insect toxin which comprises expressing in a

host other than *Photorhabdus luminescens* W-14

- a) DNA that encodes TcdA1,
- b) DNA that encodes a protein of SEQ ID NO:10, and
- c) DNA that encodes a protein selected from the group consisting of TccC2, SEQ ID NO:12, SEQ ID NO:14, and SEQ ID NO:16.